

Work Order ID 50675

July 21, 2009 8:20:18 AM



Page 1

Item ID: D2600-3-BENT

Accept



Setup Start



Revision ID: D1/F

Stop



Item Name: Extrusion Bent

Start Date: 07/21/2009 Start Qty: 20.00



Cust Item ID:

Required Date: 07/31/2009 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan: MF

Date: 09-07-21 Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr	Revision Nbr
D2600	Rev D1

100



BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

Deburr one end of extrusion Drill #30 pilot holes using DT8689 Open holes to 5/16" and deburr Bend using CNC bending machine as per program 2750.C and Folio FT003. Use 5/16 locator pin on buggy "A". Check fit to Jig DT8150

110



QC

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Quality Control

Inspect work to Step 6 Ensure fit to Jig DT8150

→ S orlub21

24
19-7-21

346663

contro
X20

scrab
X4

120



Packaging

Identify as per dwg & Stock Location: C10

0.00

Memo

0.00

19-7-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
9/7/21	100	ADD step to pull extrusion D2600-3-120	PL	09.08.21			Skid tube

Part No: D2600-3-BENT PAR #: N/A Fault Category: Skid tube NCR: Yes No DQA: 11 Date: 09.08.21
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: 1 Date: 08.08.14

		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09.07.21	100	4 skid extrusions were scrap. Tubes kept over bending in the machine, even after the program was adjusted. R/C: Machine Malfunction	PL #6	Scrap & destroy the best section of the tube. Keep & re-linify the straight sections for weld, training test purposes. & replace Qty +4 B2460063	PL 9/7/21	Skid tube #6	09.07.21 #6	09.07.21

NOTE: Date & initial all entries

Work Order ID 50675



Page 2

July 21, 2009 8:20:18 AM

Item ID: D2600-3-BENT

Accept



Setup Start



Revision ID: D1/F

Stop



Item Name: Extrusion Bent

Start Date: 07/21/2009 Start Qty: 20.00



Cust Item ID:

Required Date: 07/31/2009 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
Description

130



QC21- Final Inspection - Work Order Release

QC

Quality Control

Set Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

0.00

09/07/22 HJ

Memo

MF 09-07-22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>DR</i>	DRAWN BY <i>DR</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>AS</i>	DRAWING NO. D2600	REV. D SHEET 1 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1

RELEASED
 98.08.25 DS

A	97.01.21	NEW ISSUE
B	97.09.09	CHANGE MATERIAL SPEC.
C	98.04.16	ADD D2600-3, UPDATE D2600-1 WIDTH, ADD DIE NO.
D	98.08.20	INCREASE MIN. UTS TO 40 KSI
DI	01.04.17	ADD PART NUMBERS & DIE NUMBERS <i>+ GP</i>

GENERAL NOTES

1. MATERIAL: 6061-T6 (QQ-A-200/8)

MINIMUM YIELD TENSILE STRENGTH = 35 ksi
 MINIMUM ULTIMATE TENSILE STRENGTH = 40 ksi
 MINIMUM ELONGATION = 8 %

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED
 TO ASTM STANDARD B221 BY AN APPROVED TESTING
 FACILITY TO ENSURE THAT THE BATCH MEETS THE
 ABOVE MINIMUM MECHANICAL PROPERTIES.

2. BREAK ALL SHARP CORNERS 0.010 MAX.

3. NO TOOLING MARKS.

4. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE
 NOTED.

5. ALL DIMENSIONS ARE IN INCHES.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

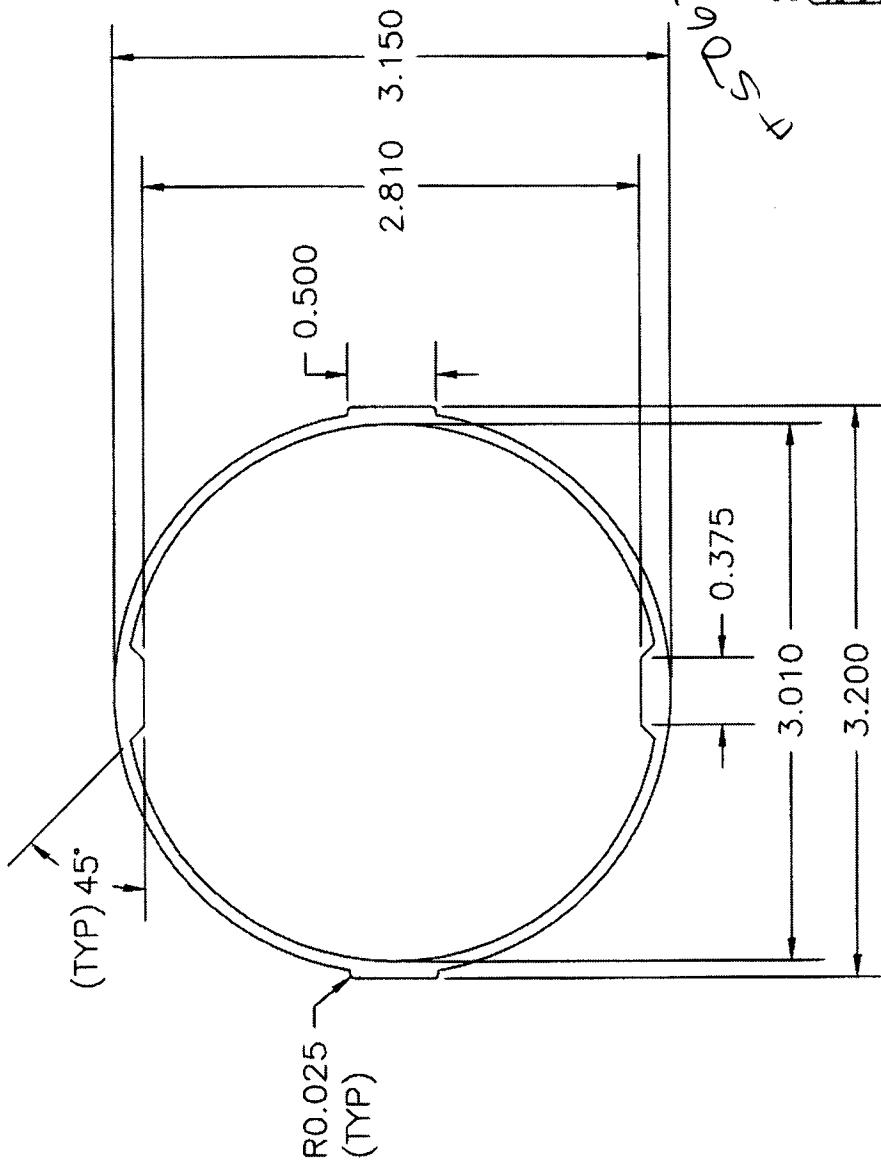
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DRAFT COPY

DESIGN <i>BB</i>	DRAWN BY <i>JH</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>JH</i>	DRAWING NO. D2600	REV. D SHEET 2 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1

D2600-1

MANUFACTURED WITH CARADON INDALEX DIE # MH-18870
or BON L DIE # 897121 (PREFERRED CHOICE)
PART NUMBER IS D2600-1-XXX WHERE XXX IS CUT LENGTH IN INCHES (EG. D2600-1-160 IS 160" LONG)



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

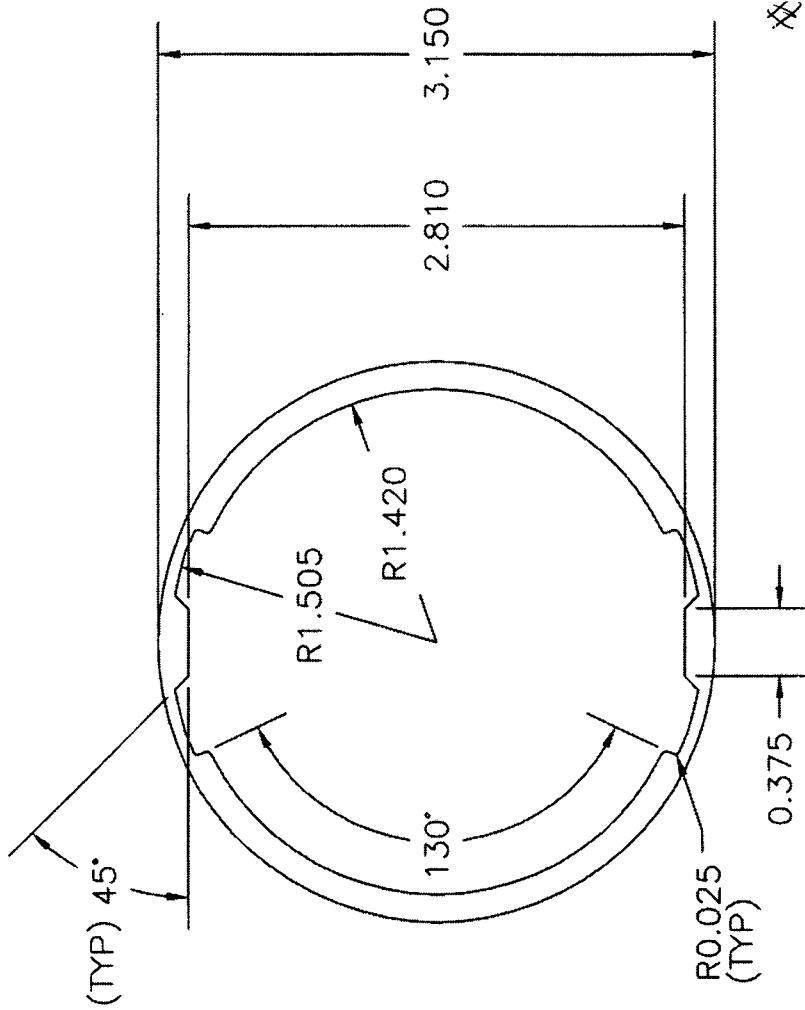
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DARTCOPY ISSUED
TO DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. D SHEET 3 OF 5
RE	CH	D2600	SCALE 1:1
DATE		TITLE	
98.08.20		EXTRUSION	

D2600-3

MANUFACTURED WITH CARADON INDALEX DIE # MH-18859
OR BON L DIE # 897122 (PREFERRED CHOICE)
PART NUMBER IS D2600-3-XXX WHERE XXX IS CUT LENGTH IN INCHES (EG. D2600-3-120 IS 120" long)



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

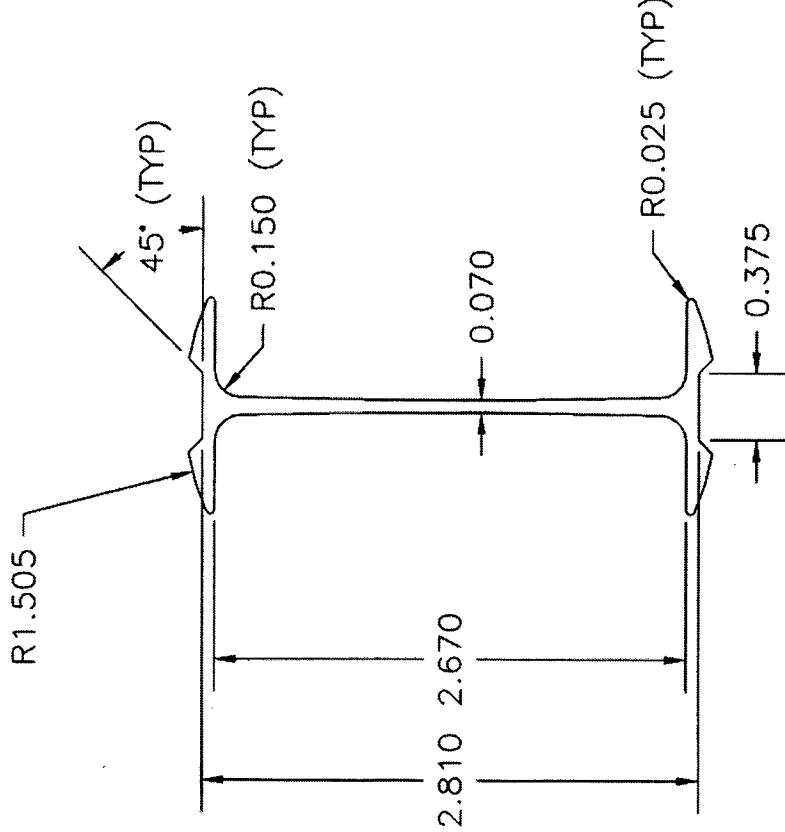
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. D
KE	J	D2600	SHEET 4 OF 5
DATE		TITLE	SCALE
98.08.20		EXTRUSION	1:1

RELEASED
98.8.25 DSD2600-5

MANUFACTURED WITH CARADON INDALEX DIE # MS-18871
PART NUMBER IS D2600-5-XXX WHERE XXX IS CUT LENGTH IN INCHES
(E.G. D2600-5-108 IS 108" LONG)



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

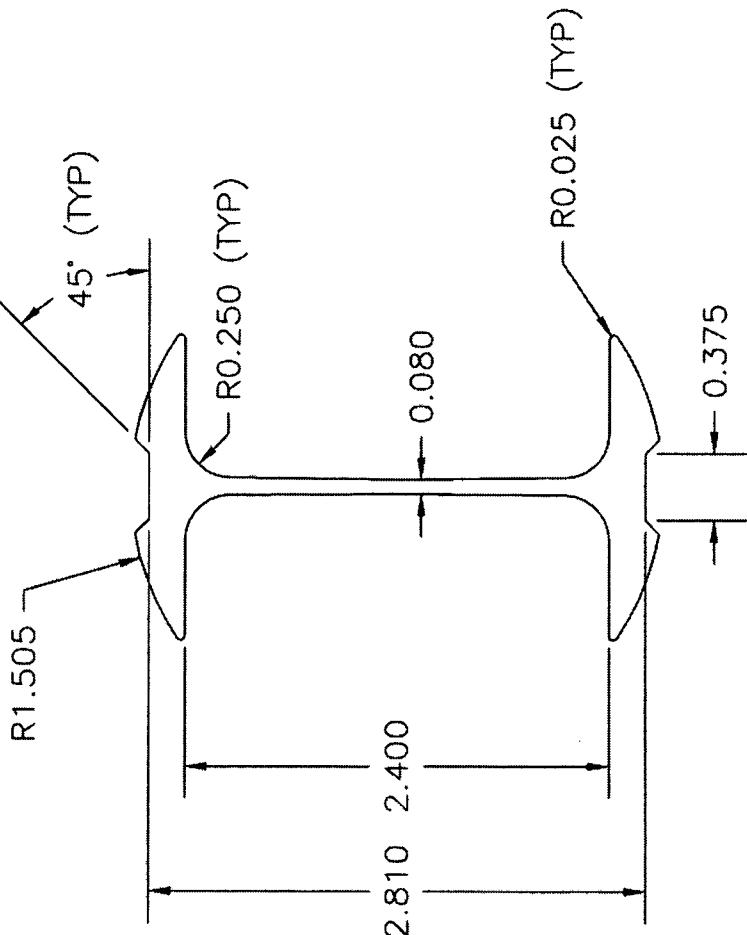
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DARTOF COPY IS
DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED	APPROVED	DRAWING NO.	REV. D	SHEET 5 OF 5
RE	AS	D2600		
DATE	98.08.20	TITLE	SCALE	1:1
		EXTRUSION		

RELEASED
98.8.25 DSD2600-7

MANUFACTURED WITH CARADON INDALEX DIE # MS-18872
PART NUMBER IS D2600-7-XXX WHERE XXX IS CUT LENGTH IN INCHES
(Ex. D2600-7-125 IS 125" LONG)



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries